

expressing not words, but ideas, they can be used between persons who speak different languages. they are understood in Pekin and in Canton although the languages of these places are quite dissimilar. But they are cumbrous, and unless complicated by many artificial conventions—such as, for instance, the addition of symbols to signify *sounds*—they are hardly capable of expressing abstract ideas or shades of meaning.

The nations of the world have generally come to write phonographically, that is to say, to employ symbols to denote not things, or the ideas of things, but the sounds by which things or ideas are denoted in speech. This improvement was discovered very slowly. It must have been difficult for unscientific minds to conceive of the reproduction of a sound by a mark or symbol.

and the first dawnings of the idea may have arisen out of punning—the employment, for instance, of the picture of a post to signify a post-office. In this case the picture actually recalls not an object, but a sound, and is really phonographic. The next step would be to use pictorial symbols to denote the first syllable of the name of the object that they represented: thus the picture of a cabin might stand for the syllable "ca."

The analysis of syllables into letters, and the allotment of abbreviated symbols to individual letters was the final stage of the invention. But phonographic writing could easily be

misunderstood  
and took time to gain confidence. In the  
hieroglyphic inscriptions of Egypt the  
phonographic  
representation of an idea is commonly  
followed  
by an ideographic picture known as the  
"deter-  
minant " : as a child, after scrawling  
the word  
" bullock." might add, for greater  
clearness, a  
picture of the animal.  
The most difficult step in the  
development of